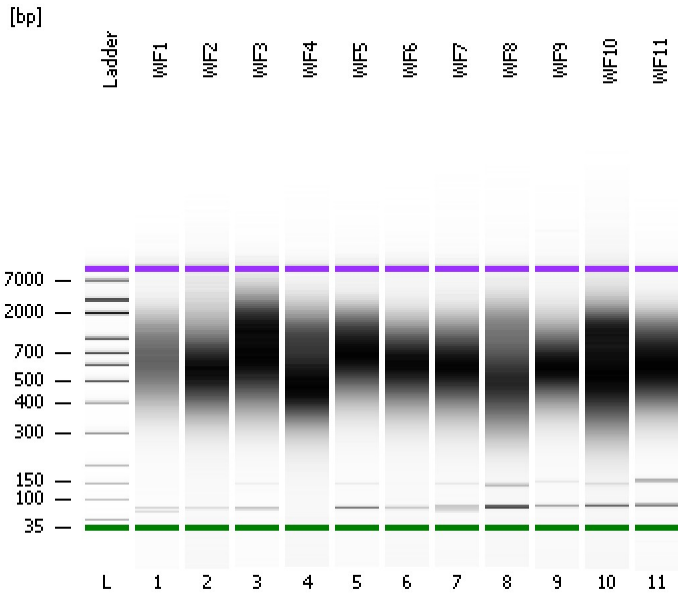


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
Modified: 6/16/2015 4:13:46 PM

Electrophoresis File Run Summary



Instrument Information:

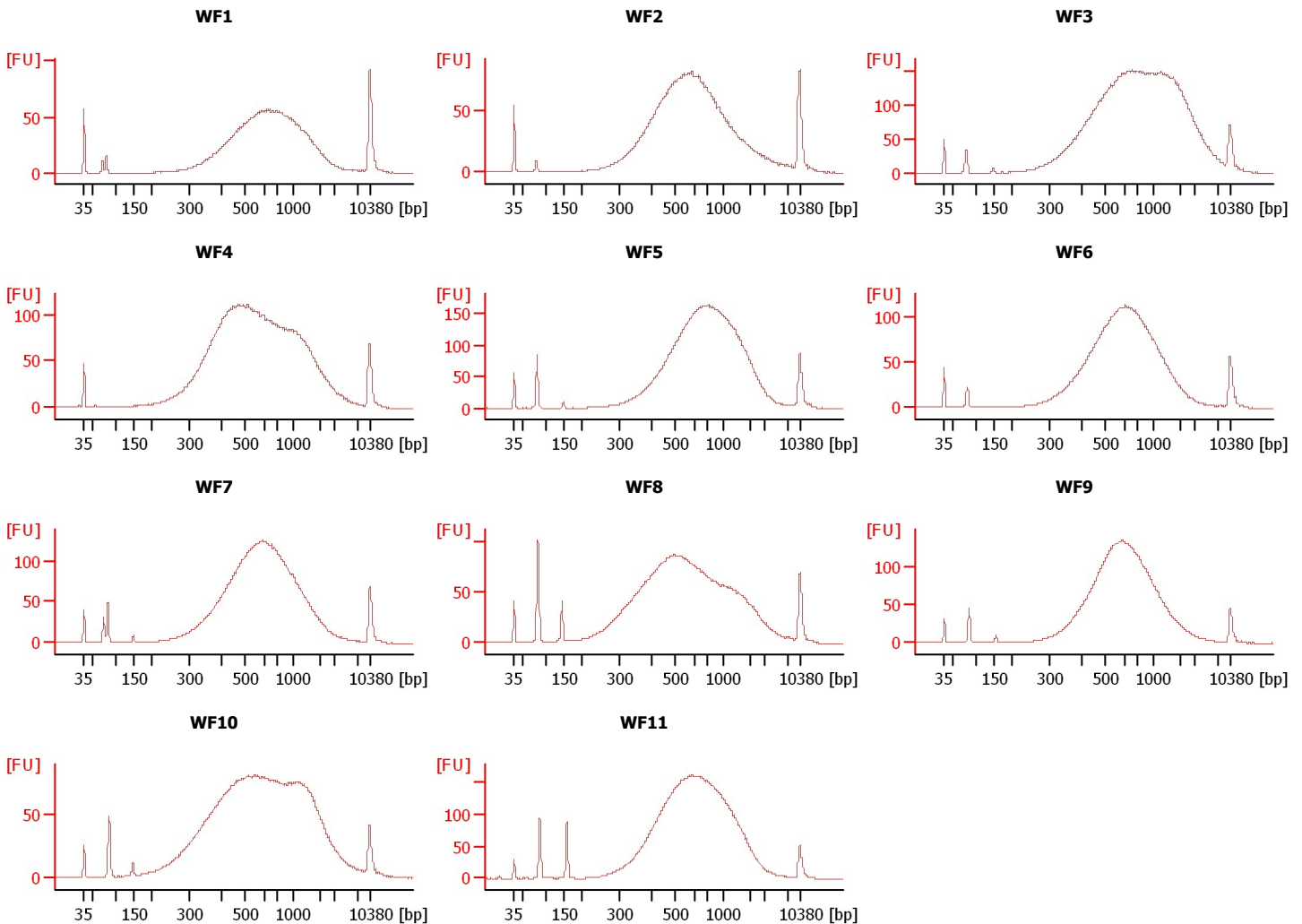
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

Chip Information:

Chip Lot #:
Reagent Kit Lot #:
Chip Comments:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WF1		<input type="checkbox"/>	✓			
WF2		<input type="checkbox"/>	✓			
WF3		<input type="checkbox"/>	✓			
WF4		<input type="checkbox"/>	✓			
WF5		<input type="checkbox"/>	✓			
WF6		<input type="checkbox"/>	✓			
WF7		<input type="checkbox"/>	✓			
WF8		<input type="checkbox"/>	✓			
WF9		<input type="checkbox"/>	✓			
WF10		<input type="checkbox"/>	✓			
WF11		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
Modified: 6/16/2015 4:13:46 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/μl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/μl] : 125
Upper Marker Concentration [pg/μl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

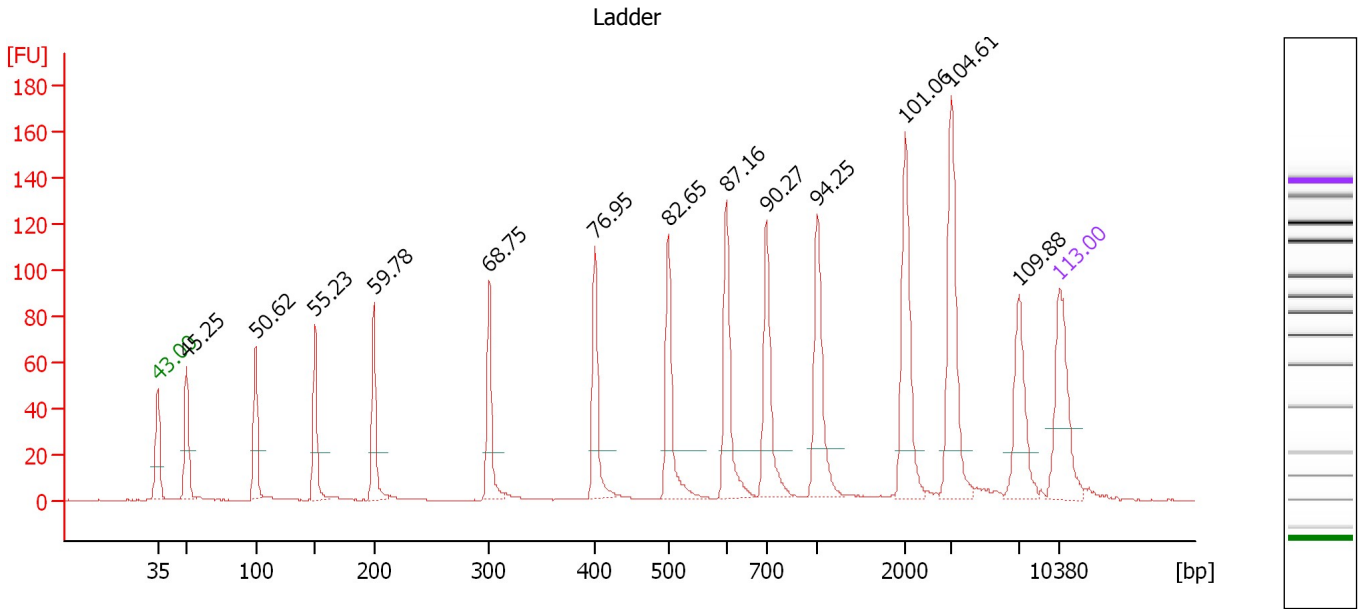
Ladder

Ladder Peak	Size	Area
1	35	160
2	50	210
3	100	208
4	150	221
5	200	242
6	300	270
7	400	305
8	500	306
9	600	336
10	700	321
11	1000	366
12	2000	413
13	3000	411
14	7000	400
15	10380	214

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

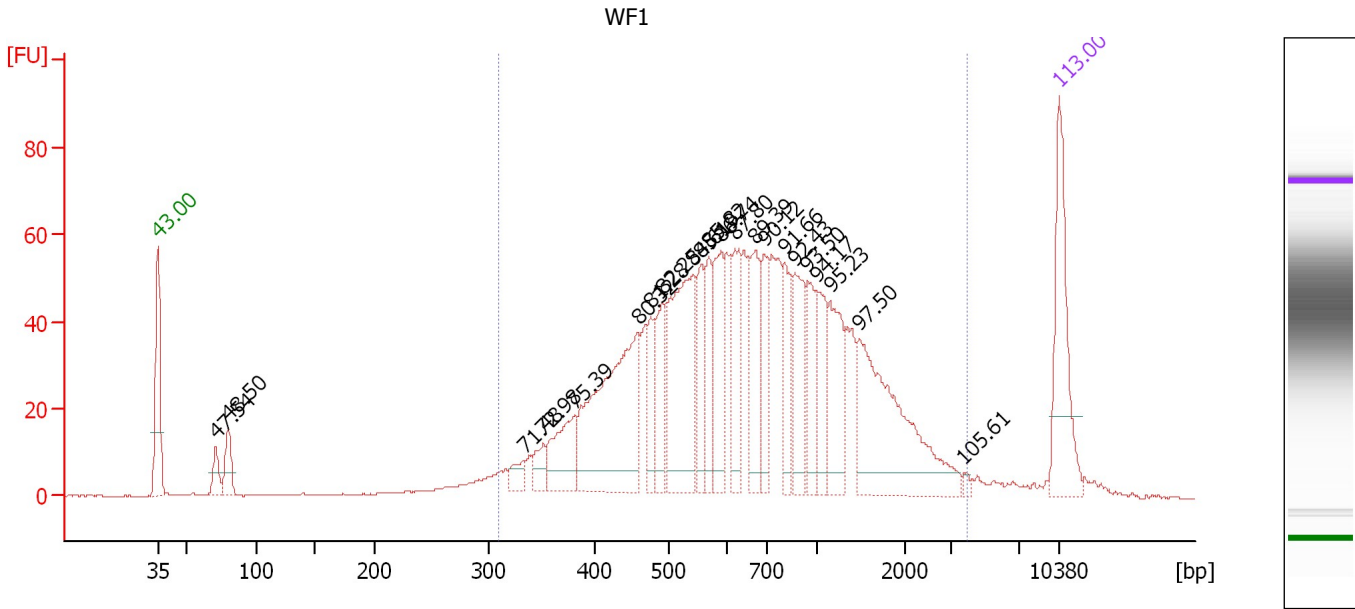
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.25
3	100	150.00	2,272.7	Ladder Peak	50.62
4	150	150.00	1,515.2	Ladder Peak	55.23
5	200	150.00	1,136.4	Ladder Peak	59.78
6	300	150.00	757.6	Ladder Peak	68.75
7	400	150.00	568.2	Ladder Peak	76.95
8	500	150.00	454.5	Ladder Peak	82.65
9	600	150.00	378.8	Ladder Peak	87.16
10	700	150.00	324.7	Ladder Peak	90.27
11	1,000	150.00	227.3	Ladder Peak	94.25
12	2,000	150.00	113.6	Ladder Peak	101.06
13	3,000	150.00	75.8	Ladder Peak	104.61
14	7,000	150.00	32.5	Ladder Peak	109.88
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WF1

Number of peaks found: 22 Corr. Area 1: 1,394.1
 Noise: 0.1

Peak table for sample 1 : WF1


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	71	22.11	470.0		47.54
3	80	31.86	601.5		48.50
4	333	15.59	70.9		71.48
5	352	18.38	79.2		72.98
6	381	55.63	221.2		75.39
7	459	199.23	657.5		80.32
8	476	37.48	119.3		81.28
9	493	54.63	167.9		82.25
10	544	145.88	406.6		84.61
11	556	47.65	129.7		85.19
12	570	44.72	118.8		85.82
13	591	61.64	158.1		86.74
14	621	58.67	143.2		87.80
15	672	61.58	138.9		89.39
16	695	44.38	96.7		90.12
17	805	45.65	86.0		91.66
18	863	59.41	104.3		92.43
19	943	41.73	67.1		93.50
20	994	43.54	66.4		94.17
21	1,144	60.02	79.5		95.23
22	1,477	145.59	149.3		97.50
23	3,762	3.11	1.3		105.61
24	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...

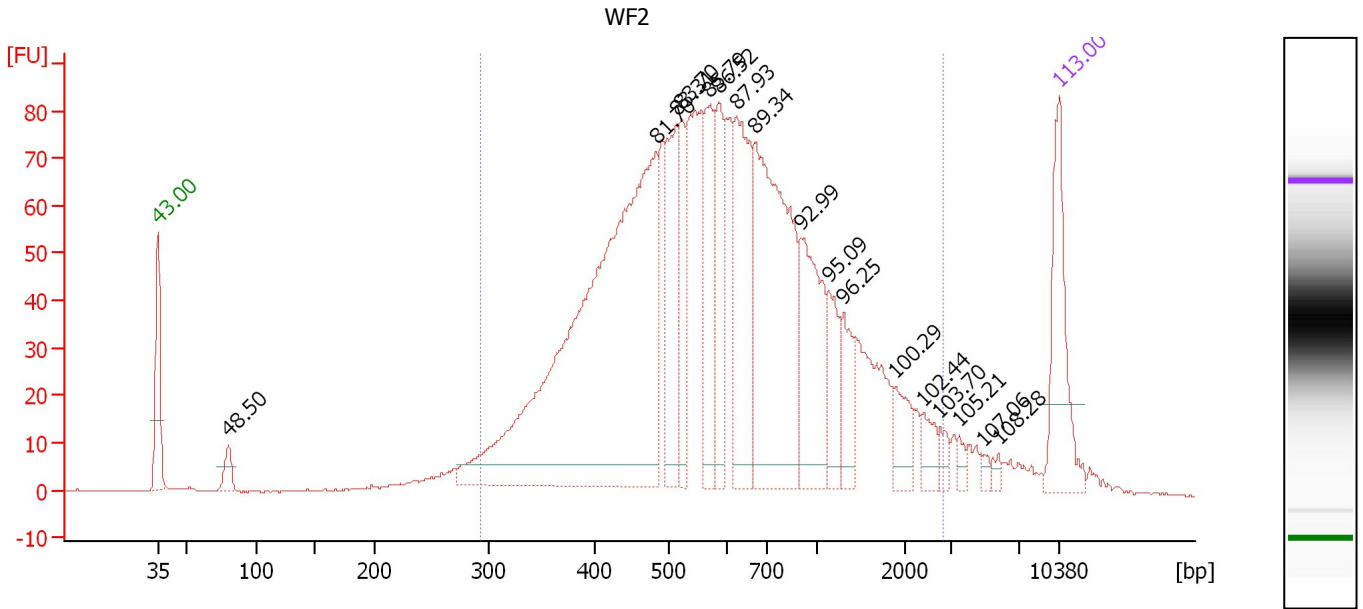
... Region table for sample 1 : WF1

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
309	844	3,982	1,394.1	3,879.5	 92	63.8	1,559.06

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : WF2

Number of peaks found: 17 Corr. Area 1: 1,969.1
 Noise: 0.2

Peak table for sample 2 : WF2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	80	22.00	415.5		48.50
3	483	712.28	2,232.9		81.70
4	515	107.04	315.2		83.31
5	523	67.63	195.9		83.70
6	570	91.04	242.2		85.79
7	586	83.52	216.0		86.52
8	625	141.41	342.9		87.93
9	670	286.15	647.0		89.34
10	905	111.05	185.9		92.99
11	1,122	41.57	56.1		95.09
12	1,294	36.66	42.9		96.25
13	1,887	28.23	22.7		100.29
14	2,388	16.58	10.5		102.44
15	2,744	9.62	5.3		103.70
16	3,456	6.41	2.8		105.21
17	4,859	4.42	1.4		107.06
18	5,782	4.86	1.3		108.28
19	10,380	75.00	10.9	Upper Marker	113.00

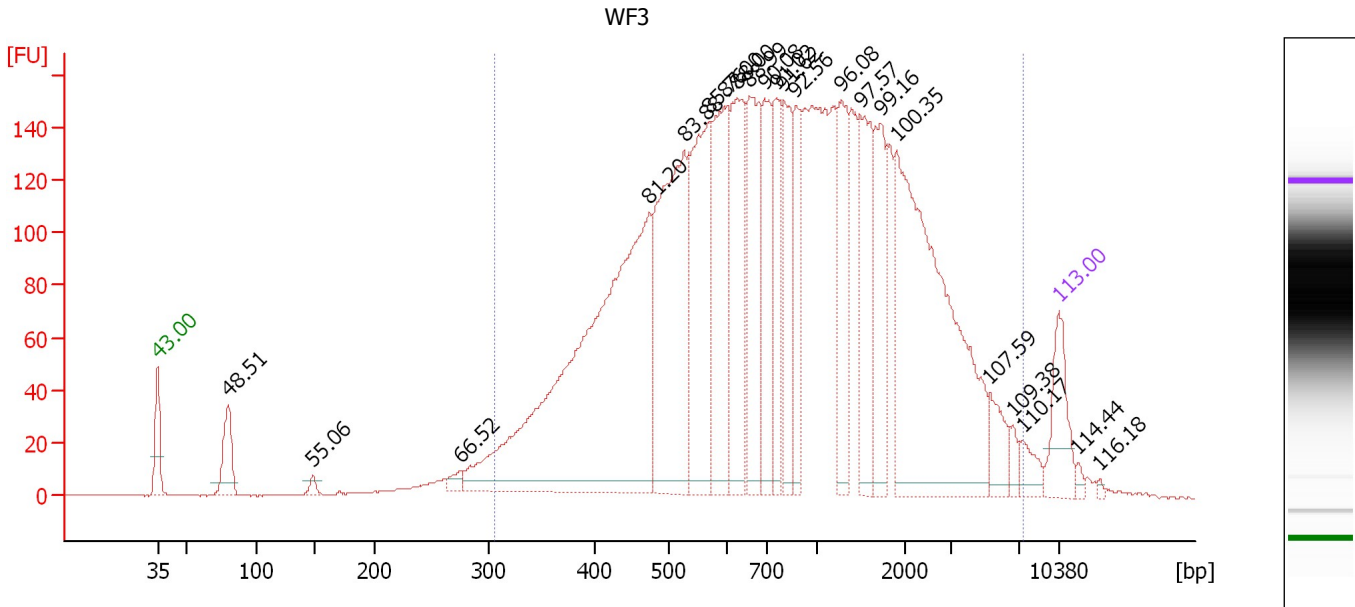
Region table for sample 2 : WF2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
293	731	2,819	1,969.1	6,012.4	92	61.6	2,182.81

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : WF3

Number of peaks found: 22 Corr. Area 1: 4,571.5
 Noise: 0.2

Peak table for sample 3 : WF3


Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	80	99.38	1,875.3		48.51
3	148	13.58	138.9		55.06
4	275	16.68	91.9		66.52
5	475	1,092.40	3,487.7		81.20
6	527	483.33	1,388.9		83.88
7	569	341.84	910.1		85.76
8	597	266.28	676.3		87.00
9	627	243.89	589.4		88.00
10	659	226.13	520.1		88.99
11	694	167.10	364.9		90.08
12	756	143.20	286.8		91.02
13	801	155.72	294.4		91.62
14	872	113.79	197.6		92.56
15	1,269	148.12	176.9		96.08
16	1,487	150.49	153.3		97.57
17	1,721	140.29	123.5		99.16
18	1,895	574.46	459.2		100.35
19	5,262	47.55	13.7		107.59
20	6,617	15.03	3.4		109.38
21	7,313	28.37	5.9		110.17
22	10,380	75.00	10.9	Upper Marker	113.00
23	11,940	0.00	0.0		114.44
24	13,824	0.00	0.0		116.18

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...

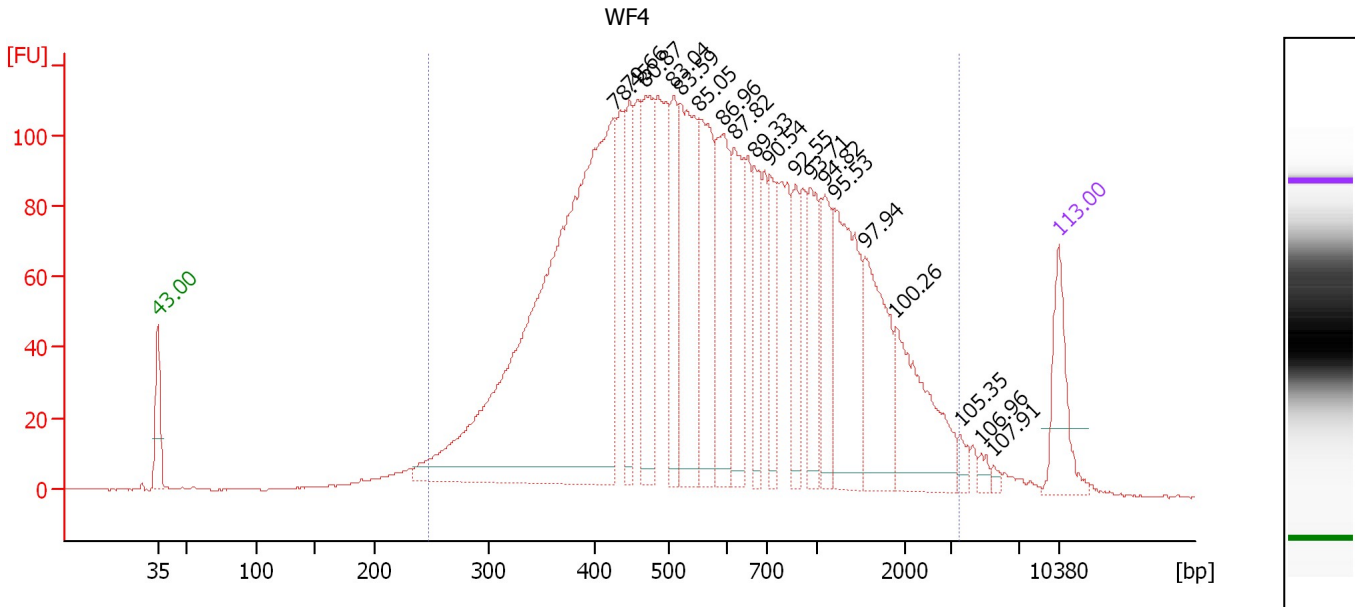
... Region table for sample 3 : WF3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
306	1,207	7,269	4,571.5	11,455.9	 95	91.3	5,103.07

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : WF4

Number of peaks found: 19 Corr. Area 1: 3,428.1
 Noise: 0.2

Peak table for sample 4 : WF4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	426	1,232.85	4,380.4		78.45
3	448	132.46	448.4		79.66
4	469	190.29	615.0		80.87
5	509	127.78	380.7		83.04
6	521	260.13	756.7		83.59
7	553	199.57	546.6		85.05
8	596	180.75	459.7		86.96
9	621	145.12	353.9		87.82
10	670	86.13	194.9		89.33
11	720	83.09	174.9		90.54
12	872	79.07	137.4		92.55
13	959	101.01	159.6		93.71
14	1,083	94.53	132.2		94.82
15	1,187	201.52	257.3		95.53
16	1,542	147.94	145.4		97.94
17	1,882	151.17	121.7		100.26
18	3,558	12.99	5.5		105.35
19	4,780	9.11	2.9		106.96
20	5,506	5.97	1.6		107.91
21	10,380	75.00	10.9	Upper Marker	113.00

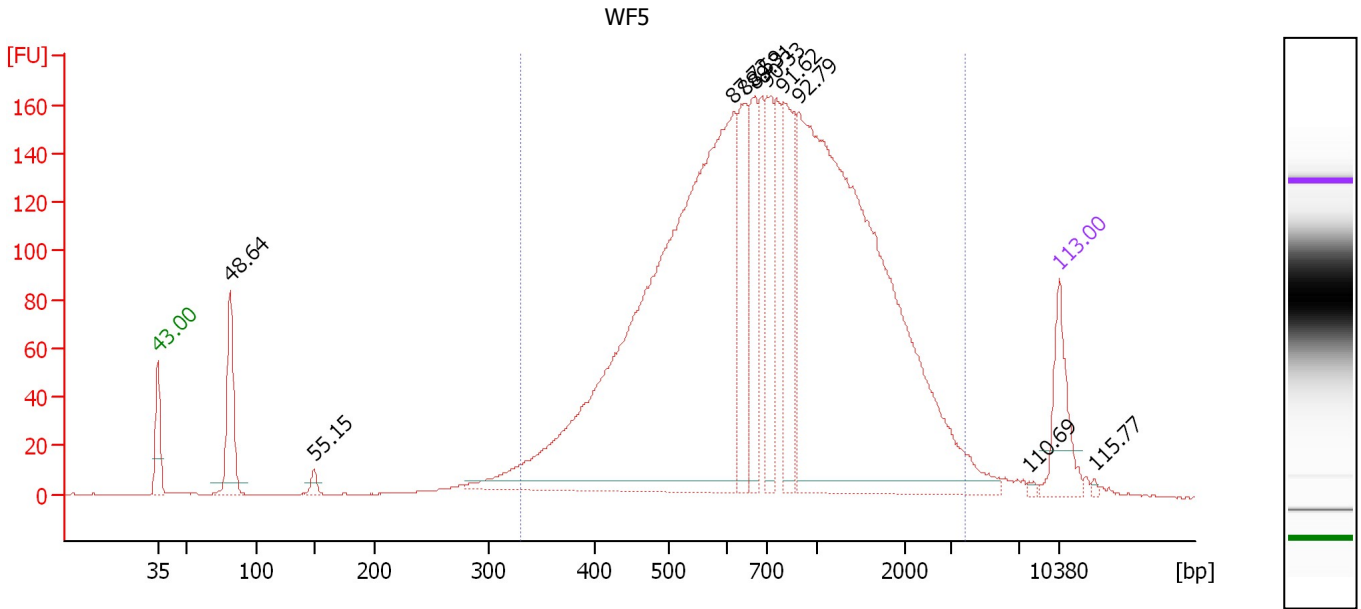
Region table for sample 4 : WF4

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
247	755	3,499	3,428.1	13,274.8	96	70.1	4,520.99

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : WF5

Number of peaks found: 10 Corr. Area 1: 3,643.4
 Noise: 0.2

Peak table for sample 5 : WF5

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	82	162.76	3,024.3		48.64
3	149	15.16	153.9		55.15
4	618	1,432.49	3,512.1		87.72
5	646	149.08	349.7		88.59
6	669	132.90	301.0		89.31
7	704	143.13	307.8		90.33
8	801	175.76	332.4		91.62
9	890	1,280.99	2,180.7		92.79
10	7,877	3.30	0.6		110.69
11	10,380	75.00	10.9	Upper Marker	113.00
12	13,383	0.00	0.0		115.77

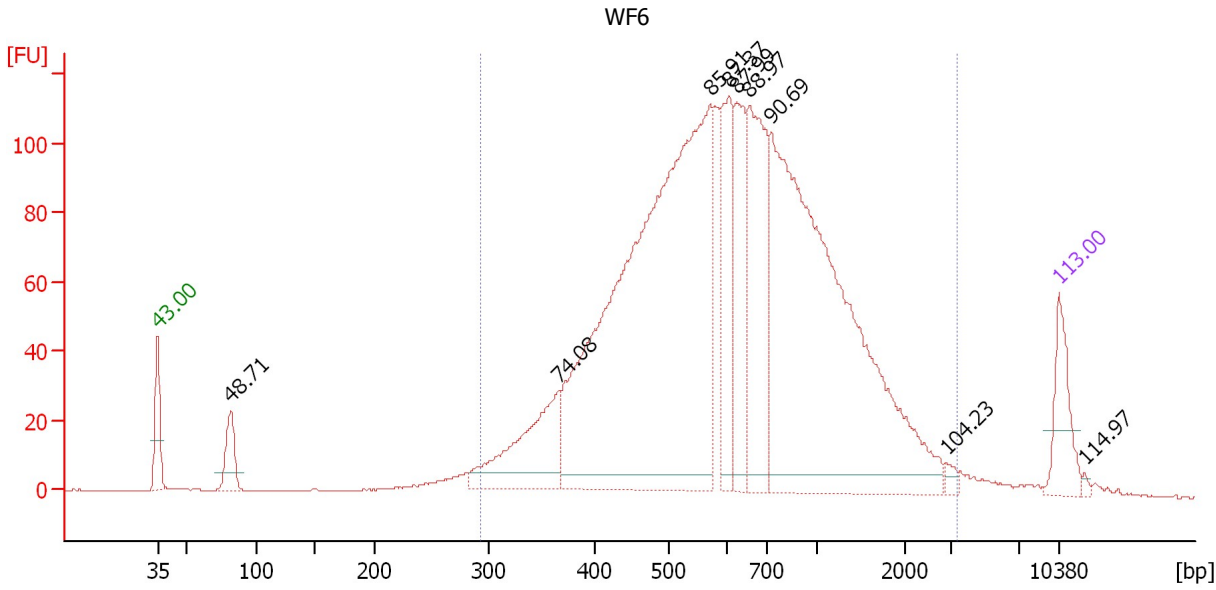
Region table for sample 5 : WF5

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
330	938	3,828	3,643.4	8,096.0	93	61.3	3,595.96

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : WF6

Number of peaks found: 9 Corr. Area 1: 2,491.1
 Noise: 0.1

Peak table for sample 6 : WF6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	82	86.85	1,601.6		48.71
3	365	232.71	965.8		74.08
4	572	1,476.65	3,908.8		85.91
5	607	195.26	487.7		87.37
6	627	184.47	446.0		87.99
7	658	301.14	693.1		88.97
8	731	1,154.51	2,392.5		90.69
9	2,893	10.02	5.2		104.23
10	10,380	75.00	10.9	Upper Marker	113.00
11	12,519	0.00	0.0		114.97

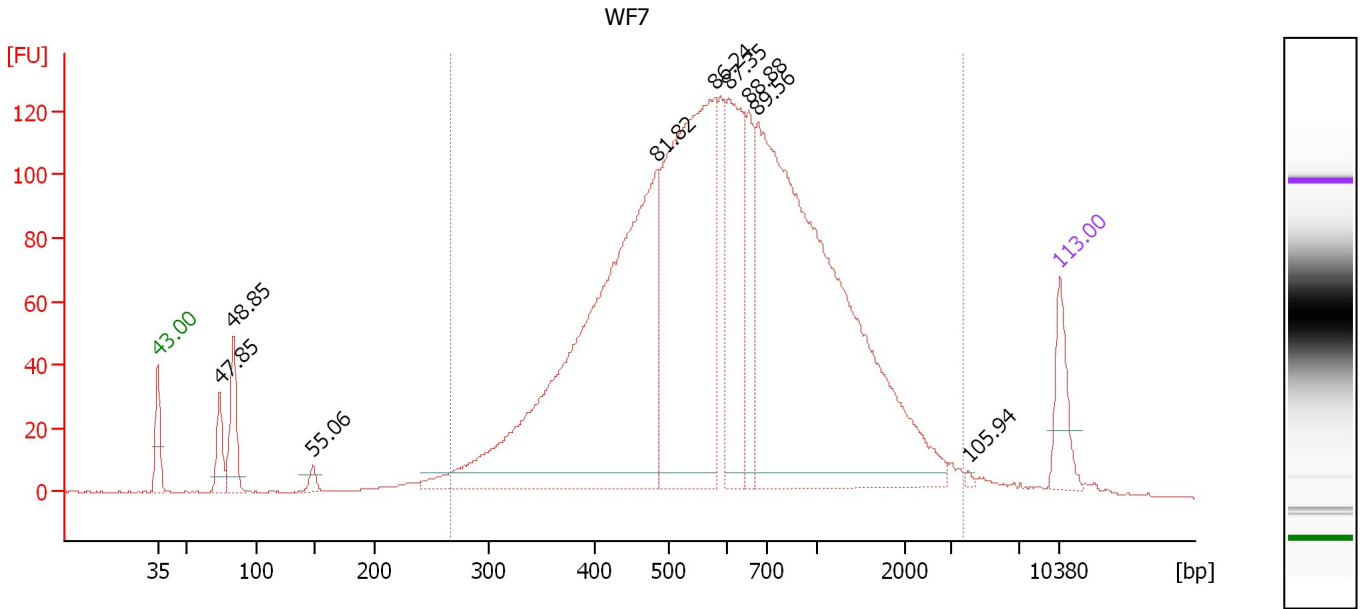
Region table for sample 6 : WF6

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
293	756	3,355	2,491.1	9,878.8	95	58.6	3,765.70

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : WF7

Number of peaks found: 9 Corr. Area 1: 2,893.8
 Noise: 0.2

Peak table for sample 7 : WF7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	74	83.96	1,715.8		47.85
3	83	140.97	2,559.2		48.85
4	148	19.87	203.1		55.06
5	485	1,406.78	4,391.0		81.82
6	580	895.71	2,341.1		86.24
7	606	344.03	860.0		87.35
8	655	140.55	325.1		88.88
9	677	1,528.28	3,419.7		89.56
10	4,011	4.03	1.5		105.94
11	10,380	75.00	10.9	Upper Marker	113.00

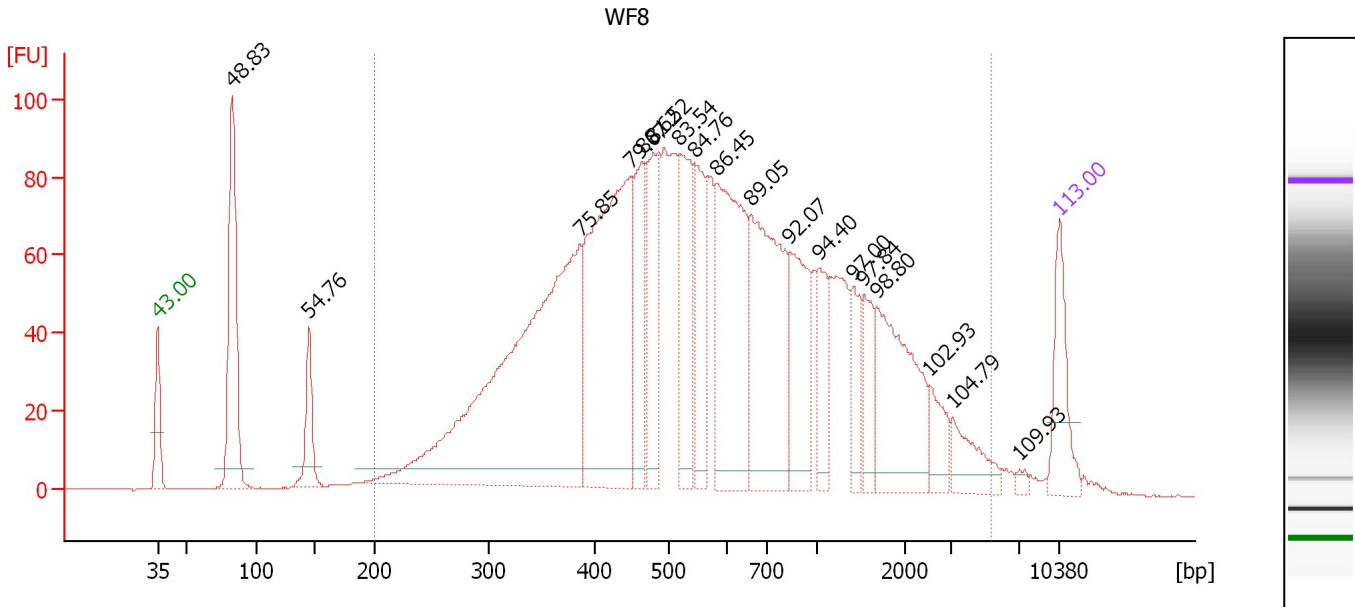
Region table for sample 7 : WF7

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
267	748	3,682	2,893.8	12,547.1	94	62.1	4,619.58

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : WF8

Number of peaks found: 18 Corr. Area 1: 2,694.6
 Noise: 0.1

Peak table for sample 8 : WF8

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	83	313.35	5,700.1		48.83
3	145	86.88	907.9		54.76
4	387	835.47	3,273.6		75.85
5	448	511.16	1,729.7		79.67
6	464	144.42	471.1		80.62
7	480	155.99	492.1		81.52
8	520	164.27	479.0		83.54
9	547	130.51	361.7		84.76
10	584	295.02	765.0		86.45
11	661	313.60	719.2		89.05
12	835	144.87	262.8		92.07
13	1,022	70.53	104.6		94.40
14	1,403	56.20	60.7		97.00
15	1,528	55.68	55.2		97.84
16	1,668	181.48	164.9		98.80
17	2,527	40.87	24.5		102.93
18	3,134	50.03	24.2		104.79
19	7,047	6.16	1.3		109.93
20	10,380	75.00	10.9	Upper Marker	113.00

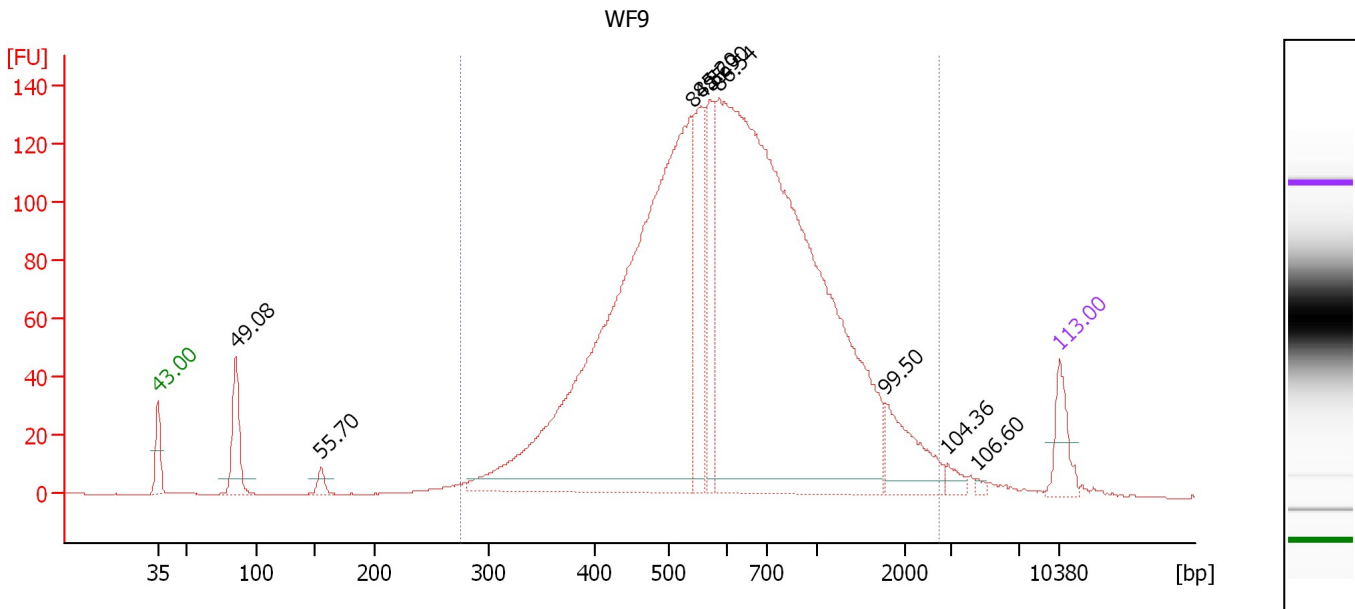
Region table for sample 8 : WF8

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	807	5,338	2,694.6	11,847.2	92	86.3	3,893.69

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : WF9

Number of peaks found: 9 Corr. Area 1: 2,773.5
 Noise: 0.1

Peak table for sample 9 : WF9

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	86	202.91	3,589.4		49.08
3	155	32.38	316.1		55.70
4	542	2,299.38	6,422.9		84.56
5	557	281.54	766.4		85.20
6	572	228.08	604.1		85.90
7	586	2,806.77	7,254.4		86.54
8	1,771	158.36	135.5		99.50
9	2,929	21.33	11.0		104.36
10	4,508	7.14	2.4		106.60
11	10,380	75.00	10.9	Upper Marker	113.00

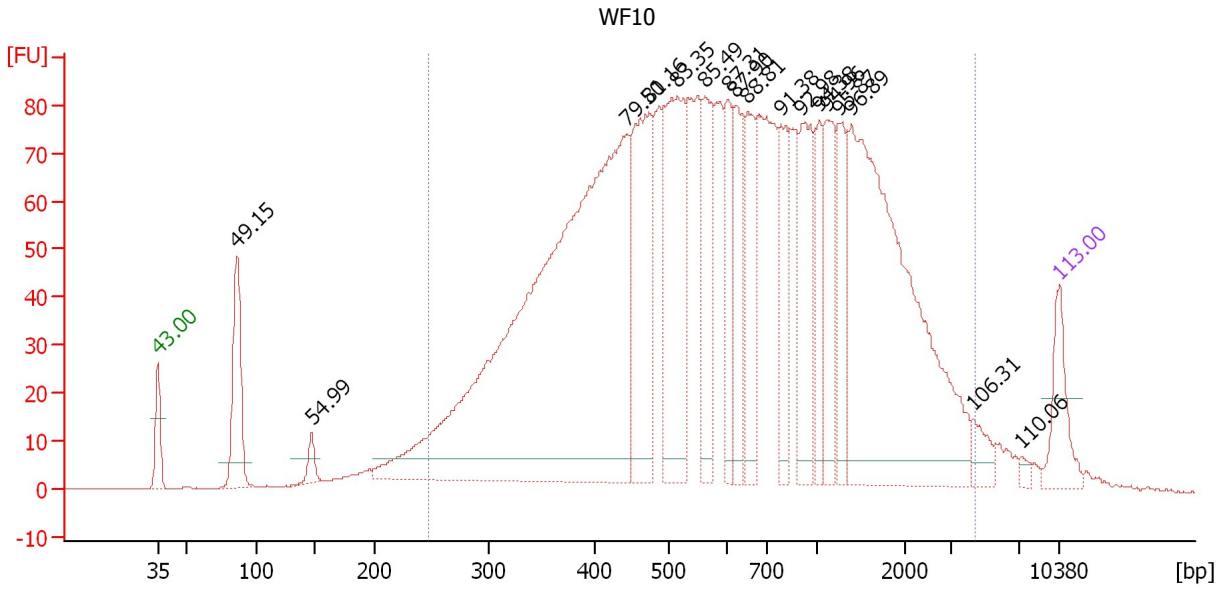
Region table for sample 9 : WF9

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
276	728	2,734	2,773.5	15,891.4	94	55.1	5,999.71

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : WF10

Number of peaks found: 17 Corr. Area 1: 2,804.2
 Noise: 0.1

Peak table for sample 10 : WF10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	86	217.65	3,820.1		49.15
3	147	32.50	334.0		54.99
4	445	1,790.74	6,100.6		79.50
5	474	349.56	1,117.8		81.16
6	516	375.88	1,104.7		83.35
7	563	176.12	473.9		85.49
8	605	126.73	317.4		87.31
9	624	125.09	303.8		87.90
10	653	161.78	375.4		88.81
11	783	140.97	272.7		91.38
12	904	189.41	317.3		92.98
13	1,018	101.81	151.5		94.38
14	1,104	139.68	191.6		94.96
15	1,238	112.26	137.4		95.87
16	1,387	772.20	843.3		96.89
17	4,290	33.33	11.8		106.31
18	7,188	8.61	1.8		110.06
19	10,380	75.00	10.9	Upper Marker	113.00

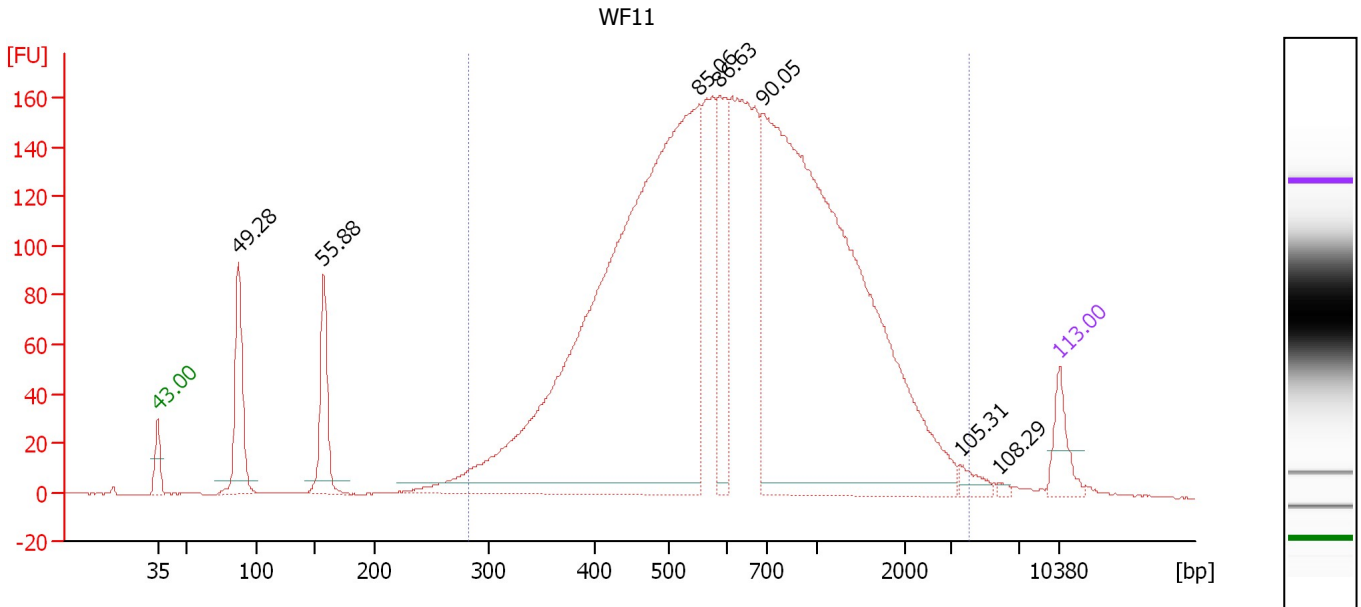
Region table for sample 10 : WF10

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
247	856	4,437	2,804.2	16,916.6	92	76.8	5,943.75

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
 Modified: 6/16/2015 4:13:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : WF11

Number of peaks found: 7 Corr. Area 1: 3,907.0
 Noise: 0.1

Peak table for sample 11 : WF11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	87	356.00	6,165.1		49.28
3	157	250.07	2,409.8		55.88
4	554	2,883.43	7,892.1		85.06
5	588	309.37	796.6		86.63
6	693	2,641.17	5,777.3		90.05
7	3,533	29.62	12.7		105.31
8	5,791	6.67	1.7		108.29
9	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 11 : WF11

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
282	797	4,089	3,907.0	18,210.7	93	63.9	6,988.76

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-06-16\2015-06-16_003.xad

Created: 6/16/2015 3:01:07 PM
Modified: 6/16/2015 4:13:46 PM

Gel Image

